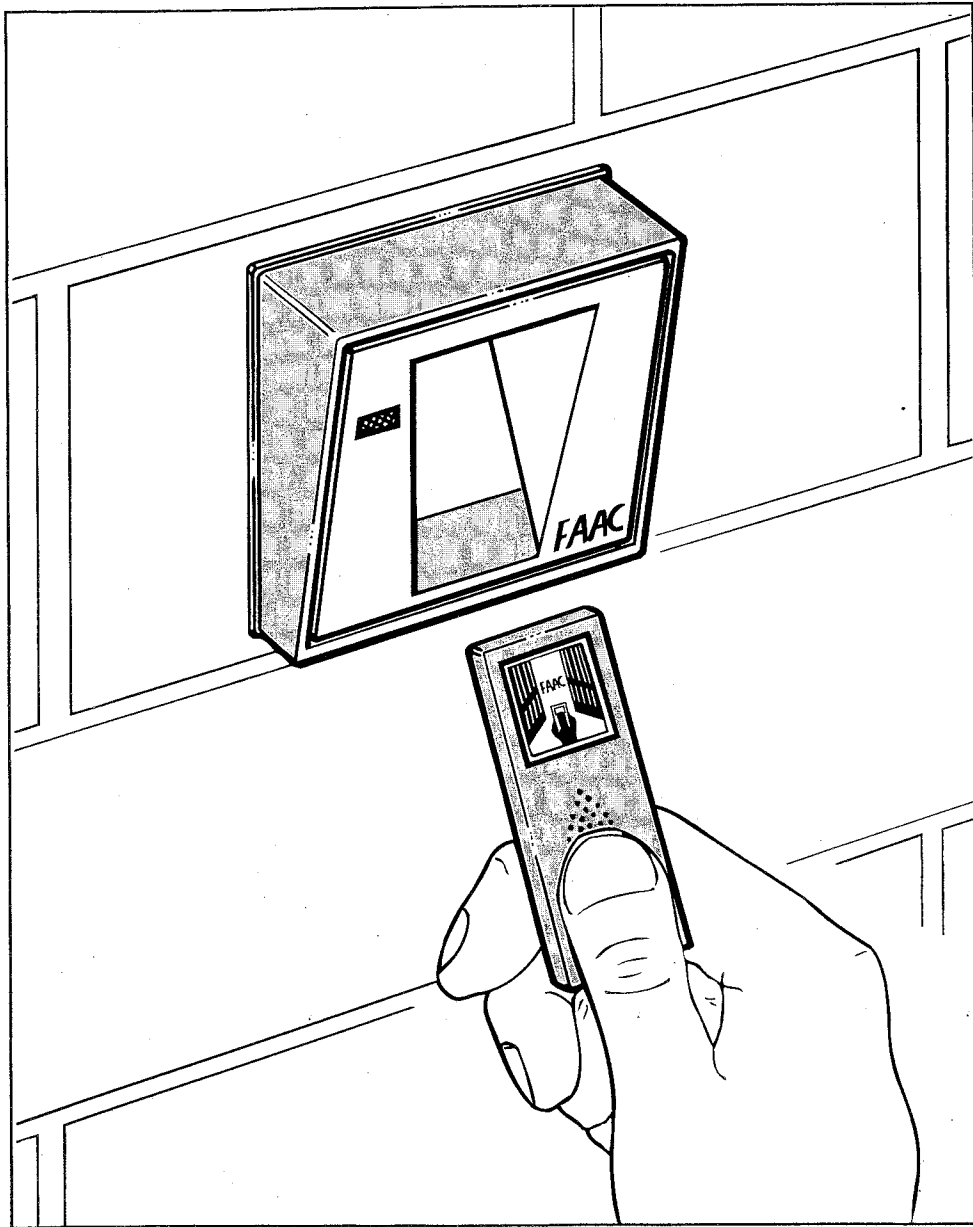


# DIGICARD

## & Decoder



# FAAC®



para la naturaleza  
100% papel reciclado



ist umweltschonend  
100% Altpapier



pour la nature  
papier recycle 100%



for nature  
recycled paper 100%



per la natura  
carta riciclata 100%



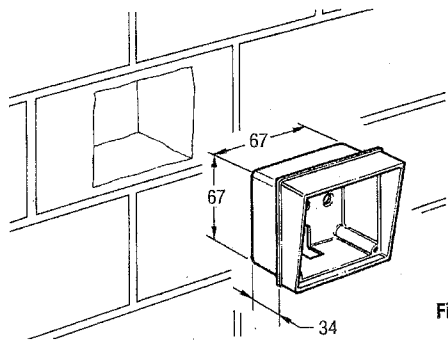


Fig. 6

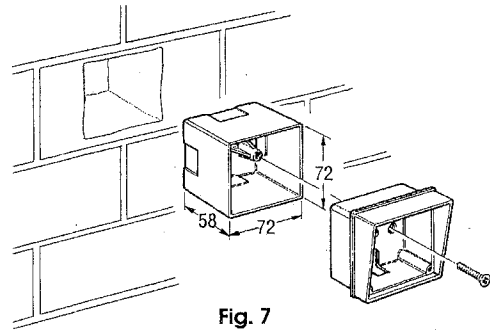


Fig. 7

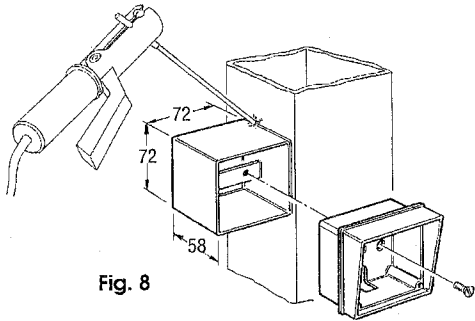


Fig. 8

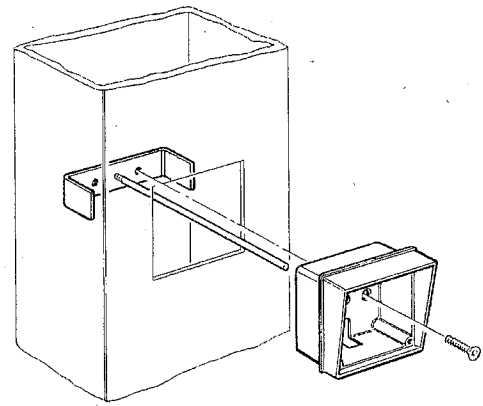


Fig. 9

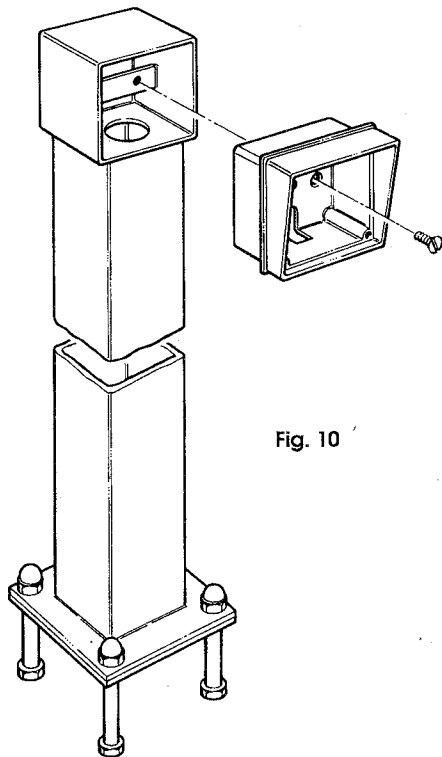


Fig. 10

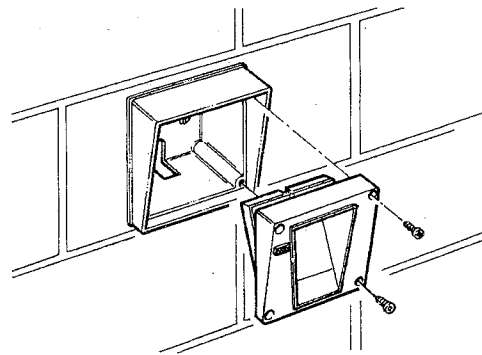


Fig. 11

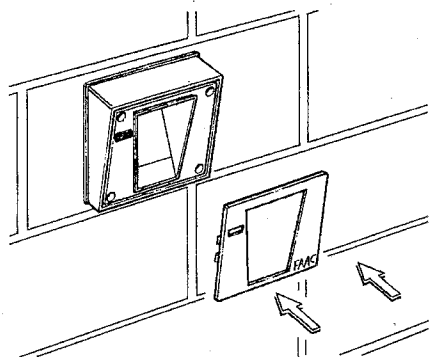


Fig. 12

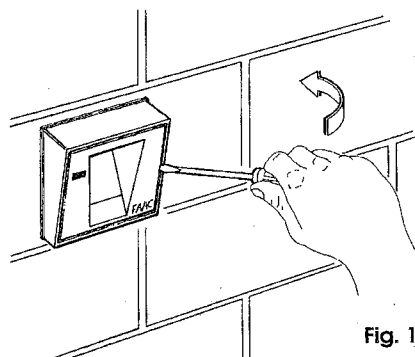


Fig. 13

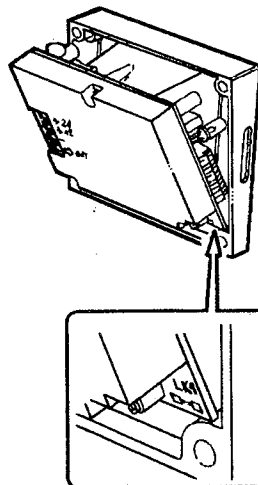
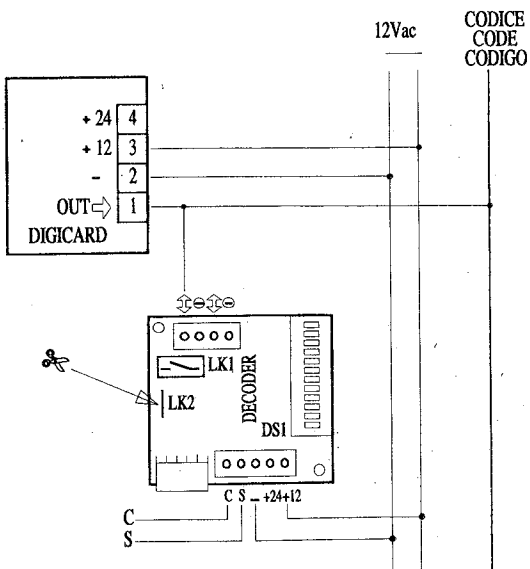
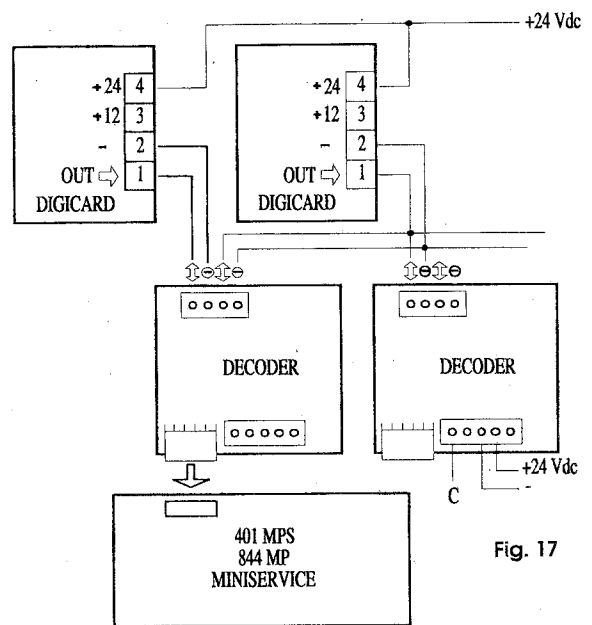
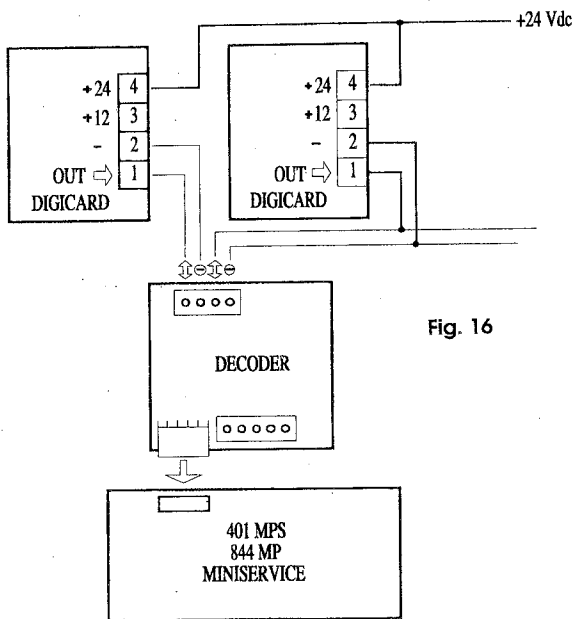
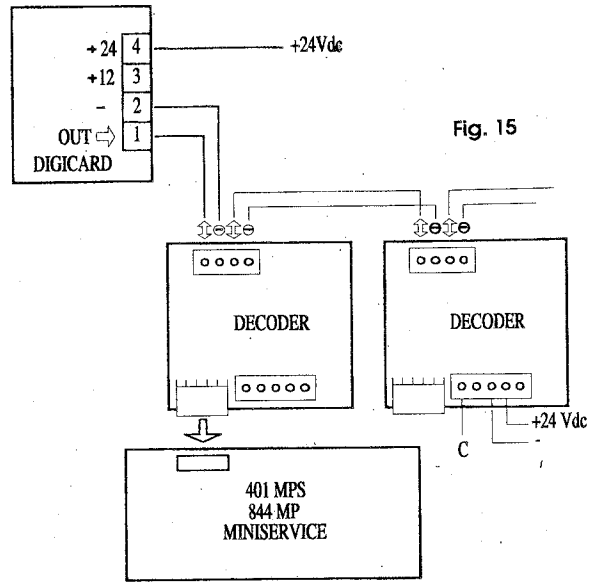
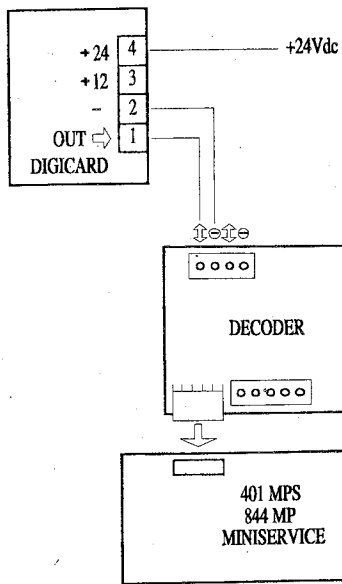


Fig. 19

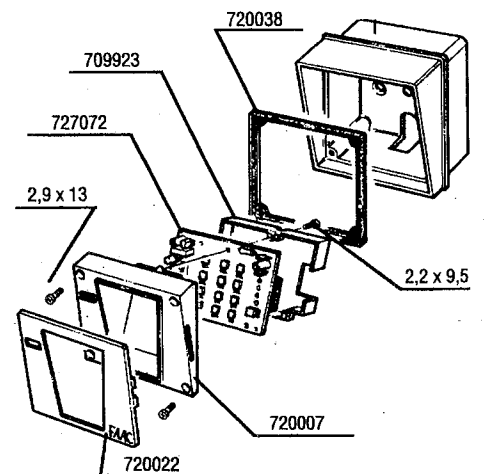


Fig. 20

# DIGICARD

Digicard is a magnetic key reader. The Digicard key is contact-read by positioning it in the stainless steel slide (Fig. 1).

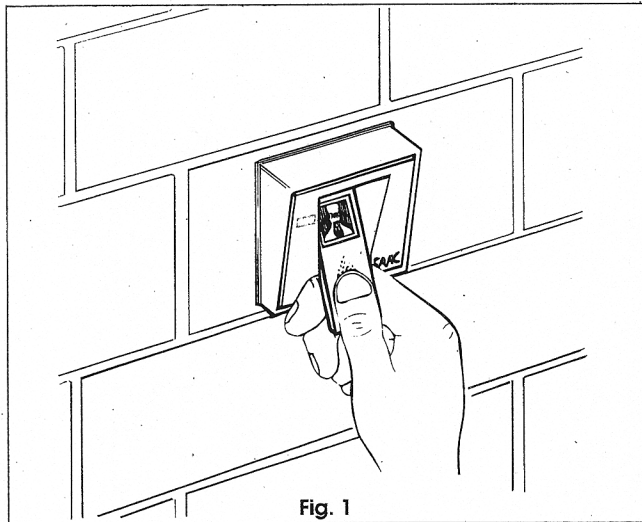


Fig. 1

## OPERATION

Digicard reads the code and transmits it by cable to one or several Decoder boards which perform recognition protocol. Each Decoder board is equivalent to an available channel.

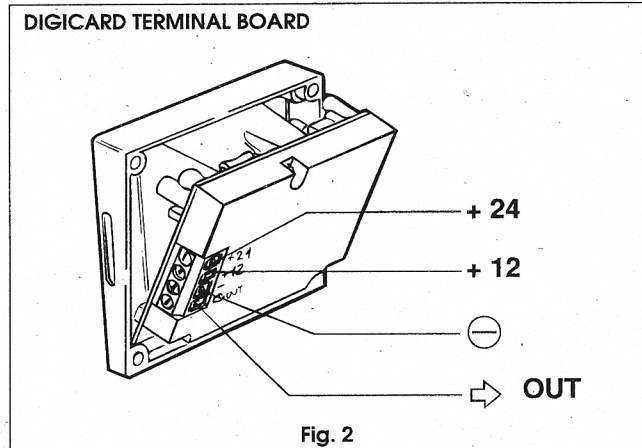


Fig. 2

## DIGICARD SPECIFICATIONS

<b>POWER SUPPLY</b>	24 Vdc ( 22 + 34 Vdc) 12 Vdc ( 9 + 20 Vdc) 12 Vac ± 15% (*)
<b>MAXIMUM POWER CONSUMPTION</b>	15 mA
<b>DECODER BOARD</b>	Decoder (MDO1)
<b>MAX NUMBER OF CHANNELS</b>	100
<b>PROTECTION GLASS</b>	IP 55
<b>OPERATING TEMPERATURE</b>	-20 + 70 °C

(\*) refers to mains power fluctuations.

## INSTALLATION

There are 4 possible solutions for installation:

- 1) WALL MOUNTING (Figs. 6 - 7)  
The box can be either mounted directly in the wall (Fig. 6) or inserted in a special plastic enclosure P/n 720043 (Fig. 7).
- 2) WELDED SOLUTION (Fig. 8)  
The box is inserted in a metal enclosure which is subsequently welded to the supporting structure (P/n 720037).

- 3) PILLAR MOUNTING (Fig. 9)  
The box is mounted to the gate/door pillar using the mounting bracket (P/n 722406). No welding is necessary for this type of installation.
- 4) COLUMN MOUNTING (Fig. 10)  
The box is installed on a free-standing column (P/n 722236) which must be mounted on baseplate (P/n 737621). To ensure perfect perpendicularity it is good policy to assemble column and baseplate prior to carrying out any masonry work.

## OPERATING LOGIC

Two operating logic modes are possible:

- 1) SINGLE PULSE (default)  
After the code has been recognized, the Decoder makes an electrical contact for approximately 2 seconds regardless of the time the key remains on the reader.
- 2) CONTINUOUS PULSE (selectable)  
After the code has been recognized, the electrical contact on the Decoder is made for as long as the key remains on the reader. The contact is broken approximately 2 seconds after the key has been removed. Perform the following steps if you wish to use continuous pulse logic:
  - cut track LK1 on the Digicard (Fig. 19)
  - set Decoder dip-link LK1 to OFF (Fig. 3).

## PILOT LAMP OPERATION

The Digicard is equipped with a pilot lamp which is normally illuminated to indicate that the unit is receiving power. Once the code has been recognized the lamp starts flashing. Flashing ceases when the key is removed. Incorrect key positioning and/or the use of incorrectly coded keys does not alter operation of the pilot lamp.

### NOTE:

- 1) If the pilot lamp does not flash, make sure that the Decoder LK1 dip-link (Fig. 3) is set to ON.
- 2) When continuous pulse logic is used the pilot lamp does not flash.

## FINAL OPERATIONS

Having made all the electrical connections, fit the body to the box by way of the four screws provided (Fig. 11) and then press the protective front panel into place (Fig. 12). If necessary, the front panel can be levered off with a screwdriver (Fig. 13).

# DECODER

The Decoder is a PCB dedicated to decoding operations (see figure 3).

## OPERATION

The code relayed from the Digicard is decoded and compared to the code set on the micro-switches. Recognition of the code causes a change in the state of the electrical contact. A quick fit connector is provided for easy connection with field equipment. Digicard also features a conventional terminal board (Fig. 3) for use when the connector is unsuitable.

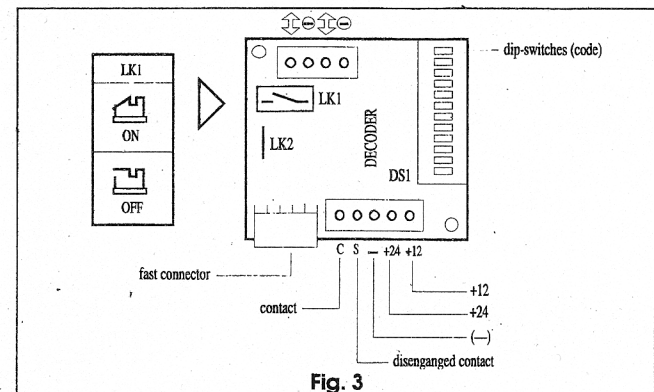


Fig. 3

## DECODER SPECIFICATIONS

POWER SUPPLY	24 Vdc ( 22 + 34 Vdc) 12 Vdc ( 11,8 + 20 Vdc) 24 Vac ± 15 % (*) 12 Vac ± 15 % (*)
MAXIMUM POWER CONSUMPTION	90 mA
RELAY CONTACT CAPACITY	0,3 A a 100 Vdc
NUMBER OF POSSIBLE COMBINATIONS	4095
MAX CABLE LENGTH (cable size 0,5 mm <sup>2</sup> )	50 m
OPERATING TEMPERATURE	-20 + 70 °C

(\*) refers to mains power fluctuations.

## ELECTRICAL CONTACT

Two types of contact are available:

- 1) PRESET CONTACT (default)  
Used for connections to FAAC electronic equipment.
- 2) FREE CONTACT (selectable)  
Cut the jumper LK2 (Fig. 3) to obtain a free contact (NA) on terminals C and S (maximum capacity 0,3 A at 100 Vdc).

## ENTERING THE CODE

In order to start operation of the system the code magnetically written on the keys must also be set on the 12 Decoder micro-switches.  
This code is written on the security card which comes with the key (see MAGNETIC KEY).

**IMPORTANT: "ALL DIP-SWITCHES OFF" IS AN ILLEGAL CODE**

## MAGNETIC KEY

The magnetic key (Fig. 4) comprises a plastic shell with a plastoferrite insert; the insert is permanently magnetized to ensure retention of the code even in the vicinity of other keys, magnetized objects and magnetic fields.

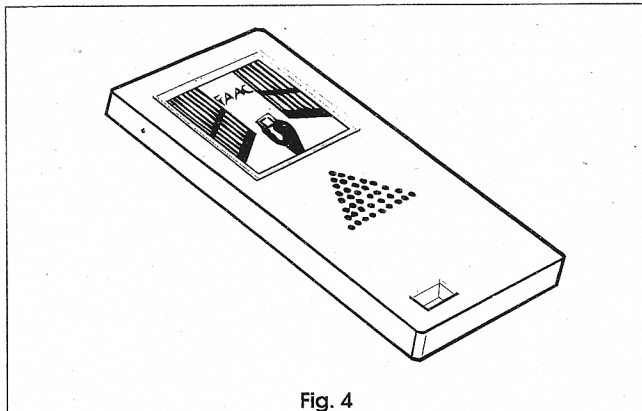


Fig. 4

**It is advisable not to place the key near magnetized objects such as credit cards, music cassettes, video cassettes, computer diskettes, etc. as they might be damaged by the magnetic fields generated by the key.**

## ENTERING THE KEY CODE

Each key can carry only one code selected from the 4095 available.

**IMPORTANT: "ALL OFF" IS AN ILLEGAL CODE.**

The key is supplied already coded, though a new code can be entered if required.  
The key comes with a Security Card (Fig. 5) on which the magnetized code is written.  
To start operation, the code written on the security card must be set on the 12 micro-switches of the Decoder.

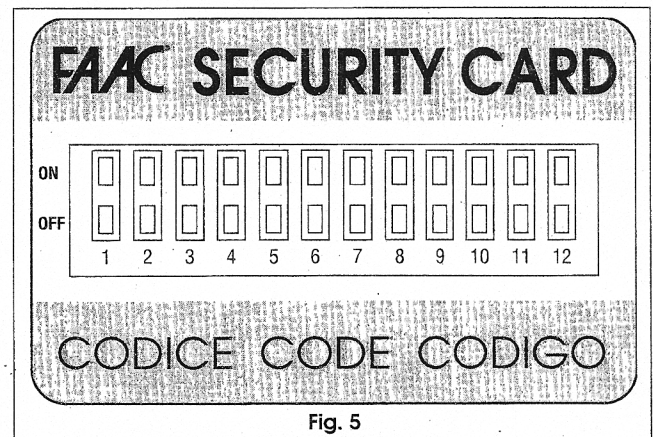


Fig. 5

If you wish to make a copy of the key send the security card to the supplier.

## D.C. CONNECTIONS

The following connection arrangements are possible:

- 1) One Digicard / one Decoder (Fig. 14 single code system) this configuration permits management of just one code.
- 2) One Digicard / several Decoders (Fig. 15 multi-code system) this configuration enables management of the same number of codes as there are Decoder cards.
- 3) Several Digicards / one Decoder (Fig. 16 single code system which requires several Digicards arranged at different points).
- 4) Several Digicards / several Decoders (Fig. 17 multi-code system which requires several Digicards arranged at different points).

## NOTE

- 1) The layouts shown in Figs. 14-15-16-17 are for a 24 Vdc power supply.
- 2) For 12 Vdc use the appropriate terminal (+12).

## ADDITIONAL ACCESSORIES

A Metaldigikey keyboard unit can be included in the system, following the same criteria for connection as for standard Digicard units.

## 12 Vac CONNECTIONS

The same configuration options as described under the "D.C. CONNECTIONS" heading are available.  
When wiring for a 12 Vac power supply, consult the diagram in Fig. 18.

## CAUTION

When wiring the system it is good policy to separate the low voltage power and signal cables from 220V mains cables.

## MAINTENANCE

No routine maintenance is required.  
Any spare parts that may be needed can be ordered following the procedure shown in Fig. 20.